

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. 202.2D6	APPLICATION NO. 10/741,929
	APPLICANT Clarence N. Ahlem, et al	
	FILING DATE December 19, 2003	GROUP 1617

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
BB	2,878,267	05/17/59	Szpilfogel et al	—	—	
I	5,567,695	10/22/96	Labrie	—	—	
I	5,763,433	06/09/98	Morfin	—	—	
I	5,776,923	07/07/98	Labrie	—	—	
I	5,837,269	11/17/98	Daynes et al.	—	—	
BB	6,077,873	06/20/00	Loozen	—	—	2/19/98

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	DOCUMENT PUBLICATION NUMBER	NAME AND PORTIONS OF DOCUMENT	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	US 2005/0075321 A1	Ahlem et al., first page and pages 102-107 (claims)	—	—	
	US 2004/0043973 A1	Ahlem et al., first page and pages 99-101 (claims)	—	—	
	US 2003/0119800 A1	Manolagas et al., entire document	—	—	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
BB	EP 0 429 187 B1	05/01/94	Europe	—	—		
I	EP 0 289 327 A	11/02/88	Europe	—	—		
I	EP 01 133 995 A2	08/02/83	Europe	—	—		
BB	DE 38 12 595 C2	10/27/88	Germany	—	—	x	

EXAMINER Dado	DATE CONSIDERED 9/13/05
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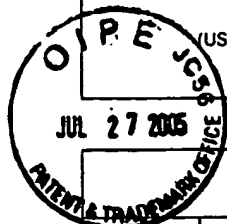
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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
BB	Araghi-Niknam et al., Modulation of immune dysfunction during murine leukaemia retrovirus infection of old mice by dehydroepiandrosterone sulphate (DHEAS), <i>Immunology</i> 90:344-349 (1997)
	Araghi-Niknam et al., Cytokine Dysregulation and Increased Oxidation IS Prevented by Dehydroepiandrosterone in Mice Infected with Murine Leukemia Retrovirus, <i>Proc. Soc. Exp. Biol. Med.</i> 216(3):386-391 (1997)
	B. F. Bebo et al., Androgens alter the cytokine profile and reduce encephalitogenicity of myelin-reactive T cells, <i>J. Immunol.</i> 162:35-40 1999
	Henderson et al., Dehydroepiandrosterone and 16 α -bromoepiandrosterone: Inhibitors of Epstein-Barr virus Induced transformation of human lymphocytes, <i>Carcinogenesis</i> , 2(7), pp. 683-686 1981
	Hernandez-Pando et al., The effects of androstenediol and dehydroepiandrosterone on the course and cytokine profile of tuberculosis in BALB/c mice, <i>Immunology</i> 95(2):234-241 1998
	P. Insera et al., Modulation of cytokine production by dehydroepiandrosterone (DHEA) plus melatonin (MLT) supplementation of old mice, <i>Proc. Soc. Exp. Biol. Med.</i> 218:76-82 1998
	Kang et al., Dehydroepiandrosterone and β -endorphin enhance IL-12 gene expression, <i>Taehan Misaengmulhak Hoechi (J. Korean Soc. Microbiology)</i> 31(4):399-404 (1996) (translation from Korean)
	Kang et al., Dehydroepiandrosterone and β -endorphin enhance IL-12 gene expression, <i>Chem Abstracts 2-Mammalian Hormones</i> 126(9) pp. 99 (Abstract 113406a) 1997
	Kousteni S, et al. Reversal of bone loss in mice by nongenotropic signaling of sex steroids, <i>Science</i> 298:843-846 2002
	Manz et al., Methyl 17 β -Carboxyester Derivatives of Natural and Synthetic Glucocorticoids: Correlation Between Receptor Binding and Inhibition of in vitro Phytohaemagglutinin-Induced Lymphocyte Blastogenesis, <i>J. Clin. Chem. Clin. Biochem.</i> 21(2):69-75 (1983)
	Sigg et al., Methyl 3 α -acetoxyetien-(8:9 or 8:14)-ate, Preliminary Communication, <i>Helvetica Chimica Acta</i> , 39:1507-1525 1956 (translation from German)
	Xia P, et al. Anti-Aids agents. Part 36: 1 17-carboxylated steroids as potential anti-HIV agents, <i>BIOORG Med. Chem</i> 7(9), pp. 1907-1911 (Sep 1999)
	Yang et al., Inhibition of HIV-1 Latency Reactivation by Dehydroepiandrosterone (DHEA) and an Analog of DHEA, <i>Aids Research and Human Retroviruses</i> 9(8):747-754 (1993)
BB	Z. Zhang et al., Prevention of immune dysfunction and vitamin E loss by dehydroepiandrosterone and melatonin supplementation during murine retrovirus infection, <i>Immunology</i> 96:291-297 1999

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						YES	NO
BB	H6-279488	10-04-94	Japan			X	

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
BB	Bruder, S. P., et al., Mesenchymal stem cells in bone development, bone repair, and skeletal regeneration therapy, <i>J Cell Biochem.</i> 56(3), pp. 283-94, 1994
	Chen, Z. et al., Estrogen receptor alpha mediates the nongenomic activation of endothelial nitric oxide synthase by estrogen. <i>J. Clin. Invest.</i> 103, pp. 401-406, 1999
	Fink, B. E. et al., Novel structural templates for estrogen-receptor ligands and Prospects for Combinatorial Synthesis of Estrogens. <i>Chem. Biol.</i> , 6, pp. 205-219, 1999
	Gao, H. et al., Comparative QSAR analysis of estrogen receptor ligands, <i>Chem. Rev.</i> , 99, pp. 723-744, 1999
	Grundy, J., Artificial Estrogens. The Technical College, Acton, London, W.S., England, pp.281-416. May 1956
BB	Jilka RL, et al., Increased osteoclast development after estrogen loss: mediation by interleukin-6, <i>Science</i> 257, pp. 88-91, 1992

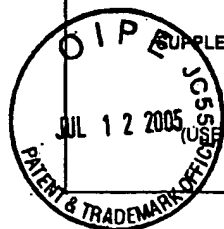
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BB	Jilka, R.L. et al., Increased bone formation by prevention of osteoblast apoptosis with parathyroid hormone, <i>Journal of Clinical Investigation</i> , 104(4), pp 439-446 August 1999.
	Khosla, S. et al., Relationship of serum sex steroid levels and bone turnover markers with bone mineral density in men and women: A key role for bioavailable estrogen. <i>J. Clin. Endocrinol. Metab.</i> 83, pp. 2266-2274, 1998
	Lea, C.K. et al., Androstenedione treatment reduces loss of cancellous bone volume in ovariectomized rats in a dose-responsive manner and the effect is not mediated by estrogen, <i>J. Endocrinol.</i> , 156, pp. 331-339, 1988
	Ojasoo, T. and Raynaud, J. P. Unique steroid congeners and receptors studies, <i>Cancer Res.</i> , 38, pp. 4186-4198, 1978
	Oursler M. J., Estrogen regulation of gene expression in osteoblasts and osteoclasts <i>Critical Review in Eucaryotic Gene Expression</i> , 8:125-140 1998
	Picherit, C. et al., Dihydrotestosterone prevents glucocorticoid-negative effects on fetal rat metatarsal bone <i>in vitro</i> , <i>Biol. Neonate</i> , 77:181-190 2000
	Pietras, R.J. and C.M.Szego. Specific binding sites for oestrogen at the outer surfaces of isolated endometrial cells. <i>Nature</i> , 265, pp.69-72, 1977
	Plotkin, L.I., et al., Prevention of osteocyte and osteoblast apoptosis by bisphosphonates and calcitonin, <i>J. Clin. Invest.</i> 104(10):1363-1374 November 1999.
	Pomper, M. G., et al., 11 β -Methoxy-, 11 β -ethyl- and 17 α -ethynyl-substituted 16 α -fluoroestradiols: Receptor-based imaging agents with enhanced uptake efficiency and selectivity. <i>J. Med. Chem.</i> , 33, pp. 3143-3155, 1990
	Riggs, B. et al. Short- and long-term effects of estrogen and synthetic anabolic hormone in postmenopausal osteoporosis, <i>J. Clin. Invest.</i> , 51, pp.1659-1663, 1972
	Santoro, N.F., et al, Therapeutic controversy: Hormone replacement therapy-where are we going? <i>J. Clin. Endocrinol. Metab.</i> 84, pp.1798-1812, 1999
	Scheven B.A., et al, Dehydroepiandrosterone (DHEA) and DHEA-S interact with 1,25-dihydroxyvitamin D ₃ (1,25(OH) ₂ D ₃) to stimulate human osteoblastic cell differentiation <i>Life Sciences</i> , 62, pp. 59-68, 1988
BB	Solmssen, U. V., Synthetic estrogens and the relation between their structure and their activity. <i>Chem. Res.</i> , 37, pp. 481-598, 1945
	Tedesco, R., Katzenellenbogen, J. A. and Napolitano, E. 7 α ,11 β -Disubstituted estrogens: Probes for the shape of the ligand binding pocket in the estrogen receptor. <i>Bioorg. Med. Chem. Lett.</i> , 7, 2919-2924 1997 <i>copy needed</i>
	Tobias, J.H., et al., 5 α -dihydrotestosterone partially restores cancellous bone volume in osteopenic ovariectomized rats, <i>Am. J. Physiol. Endocrinol. Metab.</i> 267, pp. E853-E859, 1994. <i>copy needed</i>
BB	Watts, N. B., Clinical utility of biochemical markers of bone remodeling, <i>Clin. Chem.</i> , 45, pp. 1359-1368, 1999
	Weinstein R.S. et al., Inhibition of osteoblastogenesis and promotion of apoptosis of osteoblasts and osteocytes by glucocorticoids. <i>J. Clin. Invest.</i> 102, pp. 274-282, 1998
BB	Weinstein RS et al., The effects of androgen deficiency on murine bone remodeling and bone mineral density are mediated via cells of the osteoblastic lineage, <i>Endocrinology</i> 138, pp. 4013-4021, 1997

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BB	1	2,843,608	07-15-58	Colton	1	5	
	2	2,843,609	07-15-58	Colton	1	1	
	3	4,069,321	01-17-78	Jones et al.	1	1	
	4	5,011,678	04-30-91	Wang et al.	1	1	
	5	5,116,828	05-26-92	Miura et al.	1	1	
	6	5,162,312	11-10-92	Kasch et al.	1	1	
	7	5,183,815	02-02-93	Saari et al.	1	1	
	8	5,565,444	10-15-96	Mitzushima et al.	1	1	
	9	5,795,883	08-18-83	Hesch et al.	1	1	
	10	5,817,816	10-06-98	Harimaya et al.	1	1	
	11	5,837,700	11-17-98	Labrie	1	1	
	12	5,843,934	12-01-98	Simpkins	1	1	
	13	5,846,960	12-08-98	Labrie	1	1	
	14	5,880,117	03-03-99	Arnold	1	1	
	15	6,011,026	01-04-00	Bouali et al.	1	1	
	16	6,011,027	01-04-00	Arnold	1	1	
	17	6,313,180 B1	11-06-01	Loozen	1	1	
BB	18	6,667,299 B1	12-23-03	Ahlem et al.	1	1	

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	19	US 2005/0101581 A1	Ahlem et al.	—	—	
	20	US 2005/0026223 A1	Manolagas et al.	—	—	
	21	US 2004/0248078 A1	Manolagas et al.	—	—	
	22	US 2004/0220114 A1	Ahlem et al.	—	—	
	23	US 2004/0224884 A1	Manolagas et al.	—	—	
	24	US 2004/0138187 A1	Ahlem et al.	—	—	
	25	US 2004/0157812 A1	Labrie	—	—	
	26	US 2004/0116359 A1	Ahlem et al.	—	—	
	27	US 2004/0097406 A1	Ahlem et al.	—	—	
	28	US 2003/0225046 A1	Liao et al.	—	—	
	29	US 2003/0083231 A1	Ahlem et al.	—	—	
	30	US 2003/0060425 A1	Ahlem et al.	—	—	
	31	US 2002/0187970 A1	Labrie	—	—	

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							YES	NO
BB	32	WO 00/20007	04-13-00	PCT	—	—		
	33	WO 99/61044	12-02-99	PCT	—	—		
	34	WO 99/63973	12-16-99	PCT	—	—		
	35	WO 98/56386	12-17-98	PCT	—	—		
BB	36	WO 93/10141	05-27-93	PCT	—	—		

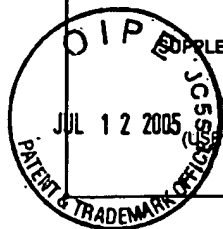
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BB	37	Karsenty, The genetic transformation of bone biology, <i>Genes & Development</i> , 13:3037-3051 1999
BB	38	Slemenda et al., Sex steroids, bone mass and bone loss, <i>J. Clinical Invest.</i> , 97:14-21 1996

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